

## ABSTRACT OF THE DISCLOSURE

In the low-lead-content plating process of the present invention, tens to hundreds ppms of lead, thallium and iron ions, which are much lower than the international "non-lead" standard, are added into a pure tin plating liquid to change the crystal phase orientation during infrared-ray reflow, thereby reducing the melting point of the plated layer.

1. A low-lead-content plating process of the present invention, comprising the steps of:  
 (a) providing a pure tin plating liquid;  
 (b) adding tens to hundreds ppms of lead, thallium and iron ions into the pure tin plating liquid to change the crystal phase orientation during infrared-ray reflow;  
 (c) plating the pure tin plating liquid onto a substrate;  
 (d) reflowing the plated layer by infrared-ray;  
 (e) reducing the melting point of the plated layer.